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Fascism was not a Developmental Dictatorship. Evidence from Simple Tests

Roberto Ricciuti[*]

Abstract: *»Der Faschismus war keine Entwicklungsdiktatur. Ein Nachweis mit einfachen Tests«.* The economic history literature on Fascism points out that its policies were strongly oriented towards capital accumulation. In this paper we analyse capital accumulation in Italy between 1881 and 1938 to verify its stability. If these policies were successful, we should observe a discontinuity in the data generation process with respect to the previous period. However, this analysis shows that the process is quite stable over time, and possible discontinuities cannot be attributed to the economic policy of the Fascist government.

Keywords: Capital accumulation, fascism, liberal Italy, AR models.

1. Introduction

Economic theory does not have a clear prediction on the effects of democracy on economic growth. On the one hand, a dictatorship may be more favourable to growth with respect to democracy because there is lower redistribution and consequently lower taxation, which in turn increases investments and capital accumulation, one of the neoclassical drivers of economic growth. On the other hand, redistribution reduces liquidity constraints and allows individuals poor in capital but rich in innovative ideas to implement product and process innovations, which are at the heath of endogenous growth models (Acemoglu and Robinson 2006). At the same time, the empirical literature does not give consistent results (Barro 1996; Persson and Tabellini 2006; Acemoglu et al. 2008; Papaioannou and Siouriounis 2008).[1]

According to Gregor (1979) fascism (which was in power from 1922 through 1943) was a developmentalist dictatorship, not differently from socialist dictatorships in the same years. His view is opposite to the conventional wisdom: "First of all, it can easily be established that Fascism, prior to its advent to power, advertised a specific program addressed to immediate problems that afflicted the national economy. Moreover, Fascism entertained a long-range economic program that was reasonably well articulated in the doctrinal

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[1] For a short review see Nannicini and Ricciuti (2010).

literature of 1921 and 1922. Furthermore, while it is true that Fascism's immediate, and some considerable part of its more comprehensive programs, were not incompatible with the interests of important segments of Italy's economic elite, those programs were autonomous, originating among its principal ideologues before allies previously unattached to the movement joined forces with Fascism. Whatever accommodation there might have been with the established economic interests of the peninsula, this accommodation was a contingent, rather than a constituent, characteristic of Fascist economic policy."

However, the assessment of this feature is not easy. Analysing 'quota 90' and the establishment of IRI,[2] Cohen (1988) claimed that were not part of an *intelligent design* from the fascist government aimed to economic growth. He concluded that Italy showed a rate of growth smaller than other European countries, and on top of that it had to pay the political cost of a dictatorship. Along the same lines, Lyttelton (1988) maintains that the modernization rhetoric appeared more important than reality, and economic growth was slower than in the Giolittian age because of the barriers raised towards the international economy.

The literature on fascist economic policy emphasises the role of capital accumulation, a reasonable target given the backwardness of the Italian economy and, more in general, the features of the economies at that time, when the modern drivers (human capital, technology) played a limited role. For this reason we analyse the dynamics of capital accumulation to assess whether there as significant discontinuities – attributable to economic policy – between fascism and the previous political regime.

The paper is structured as follows. Section 2 discusses the main features of fascist economic policy, whereas Section 3 reviews the cliometric literature of the economy during the dictatorship. Section 4 introduces the methodology and shows the results. Conclusions are drawn in Section 5.

2. Economic Policy during Fascism

The economic policy of Fascism has been characterised by an attempt to raise capital accumulation through an increase in profits. This happened by lowering wages[3] and through oligopolistic arrangements. Moreover, the import-substitution policy was aimed at enlarging the domestic market for Italian firms, again with the objective to raise profits (Fausto 2007). The consequence of these

[2] The Institute for Industrial Reconstruction had the mission to buy distressed industrial assets from mixed banks in the wake of the Great Depression.

[3] On wages and labour market during Fascism see Sabbatucci Severini and Trento (1975) and Zamagni (1976).

policies has been the creation of subsidised entrepreneurs unable to compete in the international markets, and uninterested in the innovations.[4]

Ciocca and Toniolo (1976) distinguish five sub-periods in the economic policy of Fascism: fiscal consolidation (1922-1925), 'quota novanta' (1926-1929), international crisis (1930-1932), autarchy (1933-1935), empire and preparation to war (1936-1939). The first period is associated with the free-market policy implemented by the finance minister Alberto De Stefani. The objectives were the reshaping of the industrial sector, the increase in productivity, the consolidation of public finances, the improvement of trade balance, and price stability. The main instrument of this policy was the reduction of both nominal and real wages through the 'Palazzo Chigi Agreement' in 1923.

However, price stability was missed: the excess demand due to investments led inflation to 19% in 1925 and to 5% in 1926. A depreciation of the Italian lira with respect to the sterling from 89.48 in June 1922 to 145 in July 1925 and 154 in July 1926. This depreciation was contrasted with an appreciation to 90 (the so-called 'quota 90'), obtained through capital controls, increase in interest rates, the compulsory exchange of short-term bonds into long-term ones. These policies led to the appreciation of the lira as an anti-inflation device, however 'quota 90' was more a narrative[5] than a target, and it was an attempt to impose to the bourgeoisie, which preferred an exchange rate at 120, the decisions of the government (Toniolo 1980, 123). This deflationary policy was successful, at the cost of lower demand and employment.

To counteract the depression in 1930-1932, the government used public works as an instrument to reduce unemployment and increase demand; moreover, it strengthen "cartelization" as a way to dampen the reduction of prices due to the fall in demand. In these years GDP is reduced by 15%, industrial production by 19%, private consumption is stable, whereas public consumption increase by 22%, and export is reduced by 29%.

In the following period (1933-1935) autarchy became the norm: the import substitution policy increased the return on investments, cartels allowed higher prices and the low wage policy continued. From the point of view of the real sector the effect is positive, since in 1935 there is a rebound of the international

[4] The consensus of the literature on the fascist economic policy, which we can identify with the book by Ciocca and Toniolo, is given by Bonelli et al. (1976). They claim that the policies were not substantially different from those implemented in other European countries and that in many circumstances it would have been impossible to design different policies. To some extent the critique by Bonelli e al. (1976) is even more fundamental, since the idea of "lazy capitalism" underlying this interpretation of the policies implemented by Fascism – in particular referred to the squeeze in wages – cannot be demonstrated.

[5] In the Pesaro speech in 1927 in which the "quota 90" was made public, Mussolini said: "The fascist regime is prepared to impose all the necessary sacrifices, but our lira, which is the symbol of the nation, the sign of our wealth, of our hard work, of our efforts, of our tears, of our blood, is defended and will be defended" (Cohen 1988, 103).

markets, and Italy increases its exports in the iron and steel, mechanic and chemical sectors. Growth is led by the need of increasing inventories and by investments in the sectors experiencing new domestic demand, therefore allowing for more capital accumulation. From the point of view of financial markets, however, there were pressures on gold reserves that were tackled through financial repression.

The last period includes the Empire and war preparations, and fiscal policy needs to fund increased military expenditure: public expenditure doubles between 1936 and 1938. In turn, military expenditure leads the raise in demand (investments and inventories), which is supplemented by the devaluation of the lira (40-50% with respect to the sterling, the dollar and the mark in 1936) and higher exports. Government policy works mainly on the supply side: allotment of raw materials to war industries, use of domestic natural resources, and development of techniques coherent with industrial and agricultural resources. Finally, there is also a migration policy towards Ethiopia, which was colonized in 1936.

3. The Cliometrics of Facsim

The quantitative literature on economic history of fascism is quite old (Filosa et al. 1976; Del Monte 1977) and shows two main limits. First, it is mainly obtained through descriptive statistics and not econometrics, and when such estimations were attempted, they were extremely simple and contained some mistakes. Second, new production series are now available (Fenoaltea 2003) for 1861-1913, which strongly modify the interpretation of the Italian development process, in particular concerning the economic performance before the fascist rule.

Filosa et al. (1976) built a structural model based on a keynesian-kaleckian model of the economy "in which income distribution to factors of production dominates in the short-term the formation of demand through consumption, and in the medium- long-term through accumulation and supply composition via investments. This hypothesis – which is not contradicted for the period after the Second World War, although the industrial base is more diversified and there is higher economic integration – is *a fortiori* more plausible for an antecedent stage of growth" (Filosa et al. 1976, 77-8, our translation).

In looking for continuity/discontinuity between the economy before and after WWII, this analysis mirrors ours. However, it suffers from several limitations: the time-span is very limited (1918-1938), and there are serious problems of spurious regressions, as suggested by the autocorrelation of the residuals and R2 very close to 1. Therefore, the estimates of the functions of private consumption, labour demand, price equation, imports and exports – pointing towards stability – should be taken *cum grano salis*.

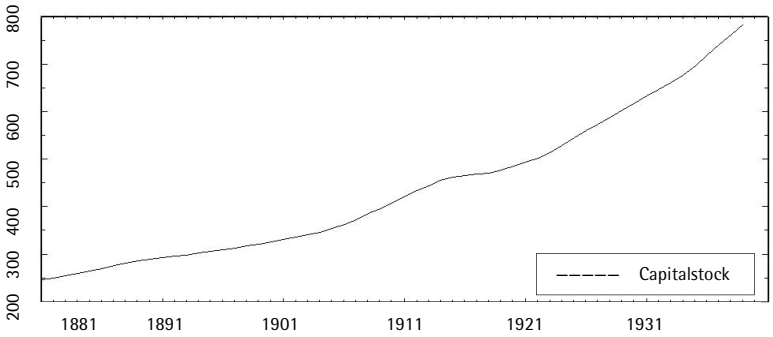
The approach followed by Del Monte (1977) is similar to ours, since it encompassed the period from 1881 to 1961, and a specific emphasis is given to the comparison between the 'Giolittian age' (1897-1913) and the fascist rule (1920-1938). In this analysis the relationship between rates of accumulation and growth rates of profits is estimated, together with the relationship between the growth rate of output per capita and rates of accumulation, finding positive and significant coefficients. However, the conclusion is that the fascist economic policy was unable to obtain higher profit rates, and that the government was allocating capital in an inefficient manner. In any case, two problems plague these results: a short number of observations, because averages of subperiods are used, and non-stationarity and cointegration issues, already noted for the previous contribution.

4. Methodology, Data and Results

The empirical strategy of the paper is the following: first, we estimate the data generating process (DGP) of the capital stock, therefore we analyse the stability of this process over time. Possible discontinuities should be attributed to exogenous events or endogenous policy decisions. Historical analysis should provide explanations for these discontinuities.

Data on capital stock are taken from Ercolani (1969) and are expressed in 1938 lira. They are constructed according to the perpetual inventory method summing yearly investments and detracting a share of the existing stock because of depreciation. Figure 1 shows the capital stock from 1881 through 1938. The series shows an upward trend, with a deceleration in the years of the First World War. In the econometric analysis data are in logs.

Figure 1: Capital Stock, 1880-1939



To analyse the stochastic properties of the series we use two unit-root tests, ADF (Dickey and Fuller 1979) and KPSS (Kwiatkowski et al. 1992). In the former the null hypothesis is the series has a unit root and the alternative is that the series is stationary. In the KPSS test the null is stationarity whereas the alternative is a unit root. We estimate both statistics with a constant and a linear trend. To assess the autoregressive structure of the test we use the Akaike Information Criterion. The results of both tests point to the same direction (Table 1), showing as it is not possible to reject the null hypothesis of unit root in the first test, and that stationarity is rejected at the 5% confidence level in the second test.

Table 1: Unit Root Test

	ADF		KPSS	
	Test Statistics	Lag	Test Statistics	Lag
Log Capital Stock	-1.183	1	0.1582	1

ADF critical values with trend are -3.96 (1%), -3.41 (5%) and -3.13 (10%). For the KPSS test they are 0.119 (10%), 0.146 (5%) and 0.216 (1%).

Then, we need to determine whether the DGP of the capital stock is ARIMA. To estimate the order of the autoregressive polynomial (p) and of the moving average process (q) we use the Hannan and Rissanen (1982) test. Using the Akaike Information Criterion, we get $p = 2$ and $q = 0$. Therefore to represent the capital stock, we can estimate an AR(2) process in first differences (Lütkepohl 2004). Table 2 gives the estimates of this process. The diagnostics tests are pretty good. Given the way in which the series is constructed, the autoregressive structure of the process is expected.

Table 2: The AR Model

Variable		(1)	
AR(1)		1.815	[0.078]
AR(2)		-0.842	[0.000]
Const		0.064	[0.070]
Portmanteau Test		3.4517	[0.750]
Test LM for autocorrelation		1.4663	[0.917]
Non-normality test	joint test	1.6858	[0.430]
	symmetry	1.2364	[0.266]
	kurtosis	0.4491	[0.503]
ARCH-LM TEST		8.7544	[0.923]

p-values are in brackets.

Figures 2 and 3 show the statistics CUSUM and CUSUM-SQ to analyse the stability over time of the estimates in column (3). The former statistics is always within the 5% area, whereas the latter shows a discontinuity on the years 1905-1915. In both cases there are no discontinuities during the fascist rule. From an historical point of view there are several events that might have negatively affected capital accumulation. First, the 1907 crisis, which lasted until

1912, was due to over-production, and led to lower investments. Second, the Italo- Turkish War in 1911-1912 to seize Libya, which first raised public debt and then taxation, with the consequence of lowering returns and therefore capital accumulation. Besides these events, there was the First World War (Toniolo 1988).

Figure 2: CUSUM Test

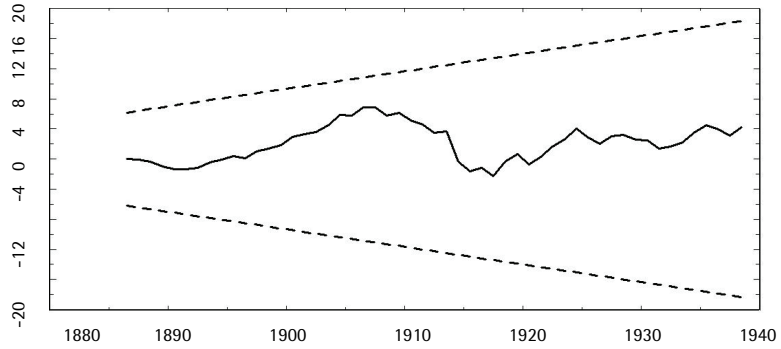


Figure 3: CUSUM-SQ Statistics

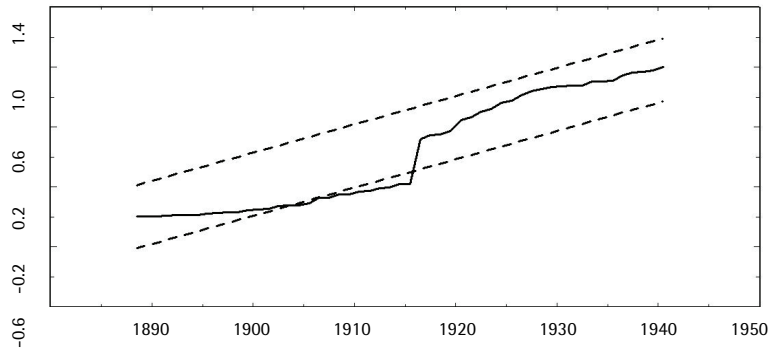


Figure 4 and 5 show the recursive coefficients of the two autoregressive terms over time. In both cases we observe some changes in their size at the beginning of the period, possibly because the estimation is based on a limited number of observations,[6] then the size tend to stabilise and from 1905 we cannot observe any discontinuity, in particular for the period in which the fascist government ruled the country.

[6] Also note that the size of bands is larger first, and then tend to reduce as long as more observations are available, improving the quality of the estimates.

Figure 4: Recursive Co-Efficient for the AR (1) Term

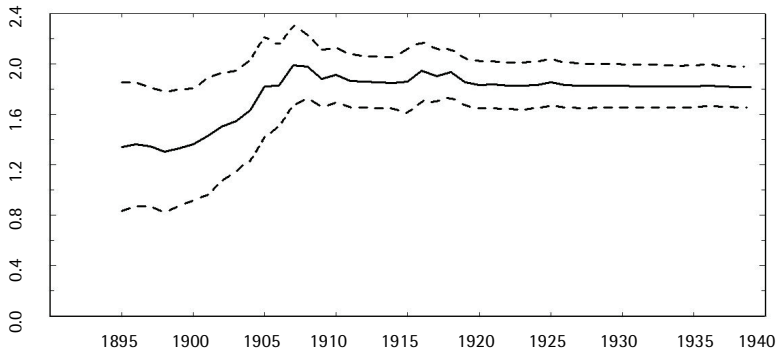
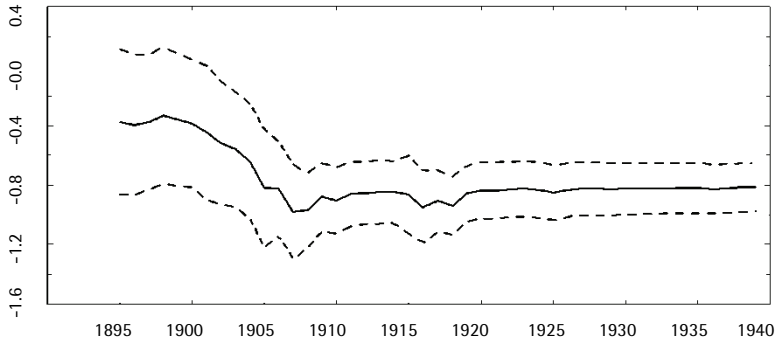


Figure 5: Recursive Co-Efficient for the AR (2) Term



5. Conclusions

In this paper we have analysed the capital accumulation process in Italy from 1881 through 1938 to verify its stability. The economic literature on the history of fascism, maintains that the economic policies were meant to increase this factor of production through an increase in the rate of profits. On the one hand, a policy of nominal wage reduction was implemented; on the other hand, protection from international competition and establishment of oligopolies were applied. Had these policies been successful, we should have found a discontinuity in the DGP with respect to the previous period. Instead, our analysis shows that the process is quite stable over time, and does not displays discontinuities related with the policies implemented by the dictatorship. Therefore, we find evidence in favour of the interpretation of the economic history of fascism

put forward by Cohen (1988) and Lyttelton (1988), which claimed that fascism was not a developmentalist dictatorship.

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